ORDER NO. MD9106054C8

Service Manual

Radio

Stereo Radio Cassette Recorder

RC-6099

Colour

(K) ..... Black Type
(W) ..... White Type

Country Code	Area	Color
(E)	Continental Europe	(K) (W)
(EB)	Great Britian	(W)
(EG)	F.R. Germany/Italy	(K)
(G)	Third Region	
(GN)	Australia/New Zealand	
(PX)	Far East PX/Europe PX	

■ SPECIFICATIONS

Frequency Range : FM : 87.5 ~ 108 MHz (E, EB, EG)
88 ~ 108 MHz (G, GN, PX)
AM : 520 ~ 1610 kHz (E, EB, EG)
525 ~ 1705 kHz (G, GN, PX)
LW : 148.5 ~ 255 kHz (E, EB)

Intermediate Frequency: FM : 10.7 MHz
AM : 459 kHz (E, EB, EG)
455 kHz (G, GN, PX)

Sensitivity : FM : 4.5 µV/50mW (E, EB, EG)
5.3 µV/50mW (G, GN, PX)
AM : 50 µV/m/50mW (E, EB)
160 µV/m/50mW (EG)
140 µV/m/50mW (G, GN, PX)
LW : 70 µV/m/50mW (E, EB)

Power Requirement : AC (E, EG) ...230V, 50Hz
(EB, GN)...230 ~ 240V, 50Hz
(G, PX)...110 ~ 127V / 220 ~ 240V } 50/60Hz
Battery: 9V, 006P (6F22/6LR61)
for Battery Back-up

Power Output : 300mW...RMS (max)

Power Consumption : (AC only) 5W (E, EB, EG, GN)
6W (G, PX)

Speaker : 8cm (3") PM Dynamic speaker (16Ω)

Dimensions : 231 (W) x 60 (H) x 153 (D) mm

: 730g (E, EB, EG)
690g (G, PX)
680g (GN) } (without batteries)

Notes:

1. Weights and dimensions shown are approximate.
2. Design and specifications are subject to change without notice.

Panasonic

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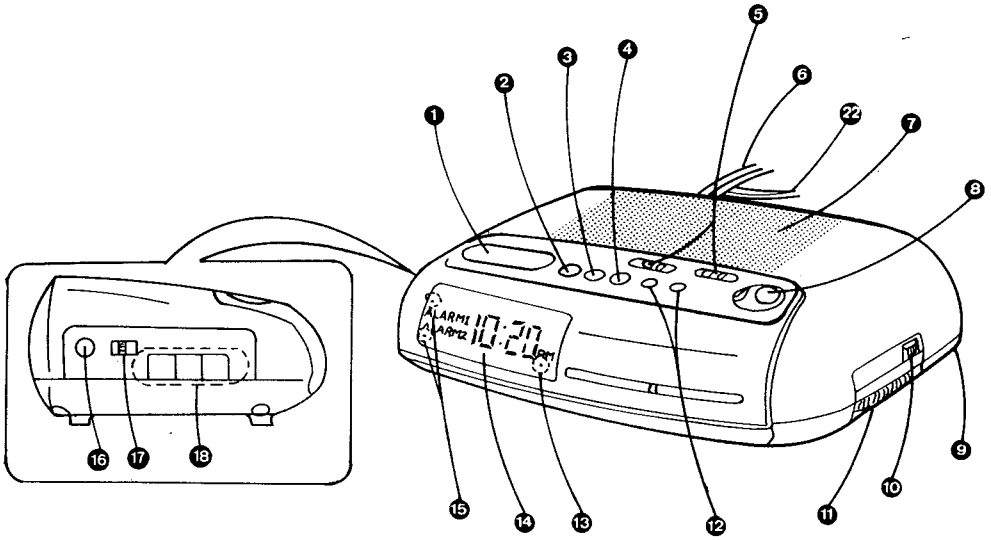
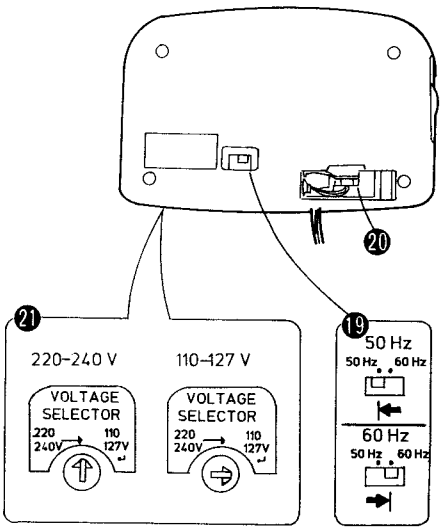
■ LOCATION OF CONTROL

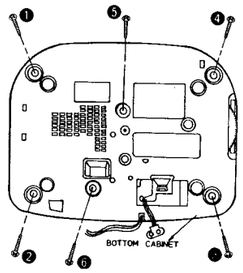


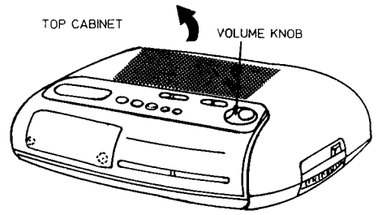


1. Doze Button (DOZE)
2. Sleep Button (SLEEP)
3. Off/Time Set Button (OFF/TIME SET)
4. Radio Button (RADIO)
5. Alarm 1 and 2 Selectors (1–ALARM–2)
6. AC Power Cord
7. Speaker 8cm (3"), 16Ω
8. Volume Control (VOLUME)
9. Back-up Battery Compartment (bottom)
10. Band Selector (BAND) (FM/AM)
11. Tuning Control (TUNING)
12. Alarm 1 and 2 Display/Adjust Buttons (DISPLAY/ADJUST)
13. PM Indicator (EB, G, PX, GN)
14. Clock Display
15. Alarm 1 and 2 Indicators
16. Headphone Jack (⊙)
17. Brightness Selector (BRIGHTNESS)
18. Time Set Buttons (TIME SET) [Side]
19. AC Frequency Selector (G, PX)
20. Back-up Battery Compartment
21. AC Voltage Selector (G, PX) (VOLTAGE SELECTOR)
22. FM Antenna Cord (E, EB, EG)

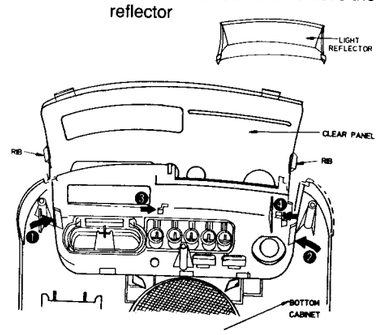
■ DISASSEMBLY INSTRUCTIONS

Ref. No. 1	Removal of Top Cabinet
Procedure 1	1. Remove the 6 screws (❶~❻) 2. Remove the volume knob 3. Remove the top cabinet in the direction of arrow

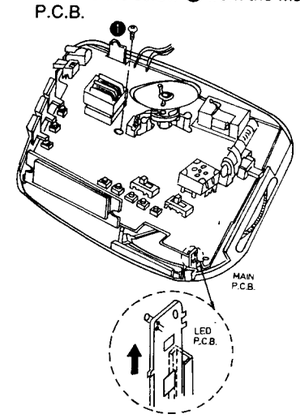




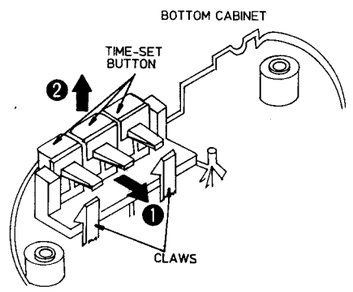
Ref. No. 2	Removal of Clear Panel and Light Reflector
Procedure 1 → 2	Clear Panel: 1. Release the 2 claws (❶~❷) in the direction of arrows and remove the clear panel Light Reflector: 2. Release the 2 claws (❸~❹) in the direction of arrows and remove the light reflector



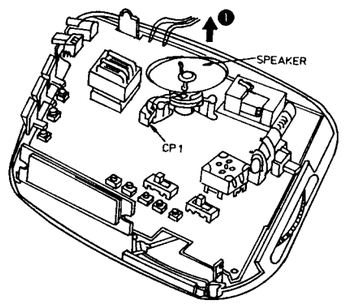
Ref. No. 3	Removal of Main and LED P.C.B.
Procedure 1 → 3	1. Remove the LED P.C.B. in the direction of arrow 2. Remove the screw ❶ from the Main P.C.B.



Ref. No. 4	Removal of Time-Set Button
Procedure 1 → 3 → 4	1. Release the 2 claws ❶ in the direction of arrows and remove the time set button in the direction of arrow ❷

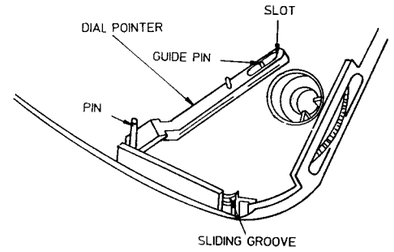


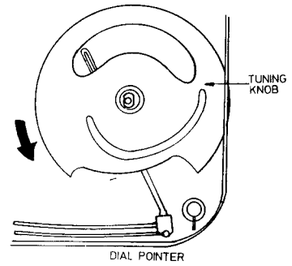
Ref. No. 5	Removal of Speaker
Procedure 1 → 5	1. Remove the connector CP1 2. Remove the speaker in the direction of arrow ❶



■ DIAL SETTING POINTS

1. Locate the slot of the dial pointer onto the guide pin of the bottom cabinet
2. Locate the pin of the dial pointer into the sliding groove of the bottom cabinet
3. Turn the tuning knob in the direction of arrow and install main P.C.B.

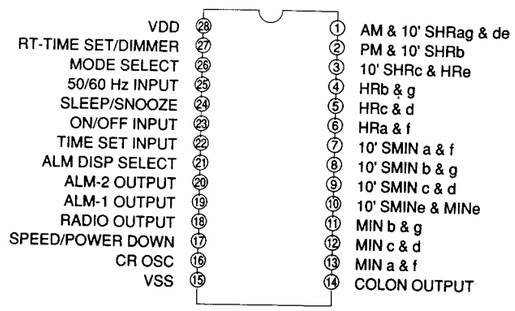




■ TERMINAL FUNCTION OF IC (ICI: LM8562)

Pin No.	Pin Name	Description
1~13	Segment signal output	Output terminals for segment drive signals.
15	V_{SS}	Power supply input.
16	CR OSC	Outputs an oscillating signal source necessary for the time base during back-up operation and operates the time counter. Also functions as an alarm tone signal. (OSC. frequency is 2.4 kHz)
17	SPEED/POWER DOWN INPUT	V_{SS} for AC operation.
18	RADIO OUTPUT	When radio on signal is received or generates at IC1, this terminal sends high signal to the radio +B voltage control circuit (Q1).
19, 20	ALARM OUTPUT 19...ALARM 1 20...ALARM 2	Outputs an alarm signal ("H" level) when the alarm time matches the current time. When this pin is momentarily grounded (V_{DD}), the alarm output stops.
21	ALM-DISP SELECT (Alarm select and time set input)	When a high signal is applied to pin 21 of IC1, the contents of alarm 2 is displayed and the setting of the time with the time setting input is enabled. When a low signal is applied, the above applies instead to alarm 1.
22	TIME SET INPUT	Applying a signal to this pin causes the value of the current time of alarm time to increment. If the input voltage is V_{SS}, the time decrements. If the input voltage is V_{DD}, the time increments. If the input voltage is a pulse signal (caused by quickly turning the time adjust knob), the speed increases.

Pin No.	Pin Name	Description
23	ON/OFF INPUT	By turning on S5, the V_{SS} (High signal) is input and the mode switches to the Radio on mode. By turning on S4, the V_{DD} (Low signal) is input and the mode switches to the Radio off mode.
24	SLEEP/DOZE INPUT	By turning on S3, the V_{SS} (High signal) is input and the mode switches to the sleep mode. By turning on S2, V_{DD} becomes connected and the mode switches to the doze mode.
25	50/60 Hz INPUT	Input terminal for noise filter circuit.
26	MODE SELECT	Terminal to input mode selection. V_{DD} : 12-hour, 60 Hz OPEN : 12-hour, 50 Hz V_{SS} : 24-hour, 50 Hz
27	RT-TIME SET/ DIMMER (Current time set and dimmer input)	Input terminal for time setting and dimmer adjustment modes. V_{SS} : DIMMER (TIME LOCK) OPEN : BRIGHT (TIME LOCK) V_{DD} : BRIGHT (TIME SET)
28	V_{DD} (ground)	Ground terminal


VDD 28
RT-TIME SET/DIMMER 27
MODE SELECT 26
50/60 Hz INPUT 25
SLEEP/SNOOZE 24
ON/OFF INPUT 23
TIME SET INPUT 22
ALM DISP SELECT 21
ALM-2 OUTPUT 20
ALM-1 OUTPUT 19
RADIO OUTPUT 18
SPEED/POWER DOWN 17
CR OSC 16
VSS 15
1 AM & 10' SHRag & de
2 PM & 10' SHRb
3 10' SHRc & HRe
4 HRb & g
5 HRc & d
6 HRa & f
7 10' SMIN a & f
8 10' SMIN b & g
9 10' SMIN c & d
10 10' SMINe & MINe
11 MIN b & g
12 MIN c & d
13 MIN a & f
14 COLON OUTPUT

■ MEASUREMENTS AND ADJUSTMENTS

■ ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ADJUSTMENT

1. Set volume control to maximum.
2. Set band switch to MW/LW or FM.
3. Set mode selector to RADIO.
4. Set power source voltage to 230V AC, 50 Hz: (E, EG). 230 ~ 240V AC, 50 Hz: (EB, GN). 110 ~ 127V/220 ~ 240V AC, 50/60 Hz: (G, PX).
5. Output of signal generator should be no higher than necessary to obtain an output reading.

■ AM-IF ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR CONNECTIONS	SIGNAL GENERATOR or SWEEP GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or OSCILLOSCOPE	ADJUSTMENT	REMARKS
(1)	MW	Fashion loop of several turns of wire and radiate the signal into loop ant. of the receiver	(GN)(G)(PX) ...455kHz (E)(EB)(EG) ...459kHz 30% Mod. at 400 Hz	Point of non-interference (on/about 600 kHz)	Earphone Jack (16~32Ω) (Fabricate the plug as shown in Fig. 3 and then connect the lead wires of the plug to the measuring instrucment.	T51 (AM IFT)	Adjust for maximum output

■ LW-IF ALIGNMENT

(2)	LW	"	(E)(EB)...262kHz	Tuning capacitor fully open	"	CT61 (LW OSC Trimmer)	"
(3)	LW	"	(E)(EB)...150kHz	Tune to signal	"	(*1) L55-2 (LW ANT Coil)	Adjust for maximum output. Adjust L55-2 by moving the ferrite core.
(4)	LW	"	(E)(EB)...250kHz	"	"	CT60 (LW ANT Trimmer)	Adjust for maximum output. Repeat steps (2) ~ (4)

(*1) Cement antenna ferrite core with wax after completing alignment.

■ MW-RF ALIGNMENT

(5)	MW	"	(PX)(G)(GN)(E) (EB)...511kHz (EG)...514 ±3 kHz	Tuning capacitor fully closed	"	L54 (MW OSC Coil)	Adjust for maximum output
(6)	MW	"	(E)(EB)...1650kHz (EG)...1639 ±5 kHz (PX)(G)(GN) ...1753kHz	Tuning capacitor fully open	"	CT50-3 (MW OSC Trimmer)	"
(7)	MW	"	(E) (EB) (EG) ...550kHz (PX) (G) (GN) ...600kHz	Tune to signal	"	(*2) L55-1 (MW ANT Coil)	Adjust for maximum output. Adjust L55-1 by moving the ferrite core
(8)	MW	"	1500 kHz	"	"	CT50-4 (MW ANT Trimmer)	Adjust for maximum output. Repeat steps (5)~(8)

(*2) Cement antenna ferrite core with wax after completing alignment.

■ FM-IF ALIGNMENT

(9)	FM	High side thru. 0.001 µF to test point TP1 Negative side to test point TP3	10.7 MHz (SWP)	Point of non-interference. (on/about 90MHz)	Connect vert. amp. of scope to test point TP5 Negative side to test point TP4	T50 (FM 1st IFT)	Wave form is shown in Fig 1.
(10)	FM	"	"	"	"	T52 (FM 2nd IFT)	Wave from is shown in Fig 2.

■ FM-RF ALIGNMENT

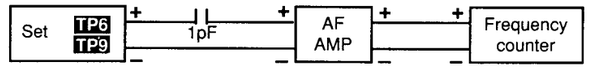
(11)	FM	Connect to test point TP2 through FM dummy antenna. Negative side to test point TP3	(PX)(E)(EB)(GN)(G)...86.2 MHz (EG)...87.35 ±0.05 MHz	Variable capacitor fully closed.	Earphone Jack (16~32Ω) (Fabricate the plug as shown in Fig. 3 and then connect the lead wires of the plug to the measuring instrucment.	L53 (FM OSC Coil)	(*3) Adjust for maximum output.
(12)	FM		(E)(EB)(GN)(G)(PX)...109.2MHz (EG...108.3 ±0.05 MHz	Variable capacitor fully open.	"	CT50-1 (FM OSC Trimmer)	"
(13)	FM		106 MHz	Tune to signal	"	CT50-2 (FM ANT Trimmer)	Adjust for maximum output. Repeat steps (11)~(13)

(*3) Three output responses will be present; proper tuning is the center frequency.

■ BATTERY BACK-UP CIRCUIT ADJUSTMENT (Note: Disconnect AC power cord)

DC POWER SUPPLY CONNECTIONS	DC POWER SUPPLY VOLTAGE	FREQUENCY COUNTER	ADJUSTMENT POINT	REMARKS
(+) Side ..... TP8 (-) Side TP9	9 volts	(+) Side ..... TP6 (-) Side TP9	VR1 (Semi-fixed)	• Adjust VR1 for 2400 ± 15Hz on frequency counter reading. (*3, 4, 5)

*3. Connect 1pF capacitor to the test point TP6
*4. Amplify its out signal by using the AF Amp.
*5. Measure the frequency.



■ ADJUSTMENT POINTS

Please refer to Circuit Board and Wiring Connection Diagram for test point location.

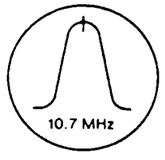


Fig. 1

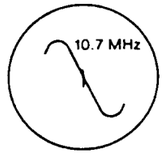


Fig. 2

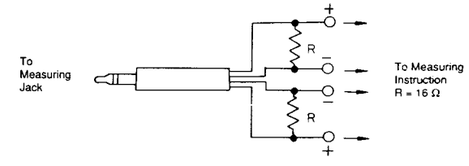
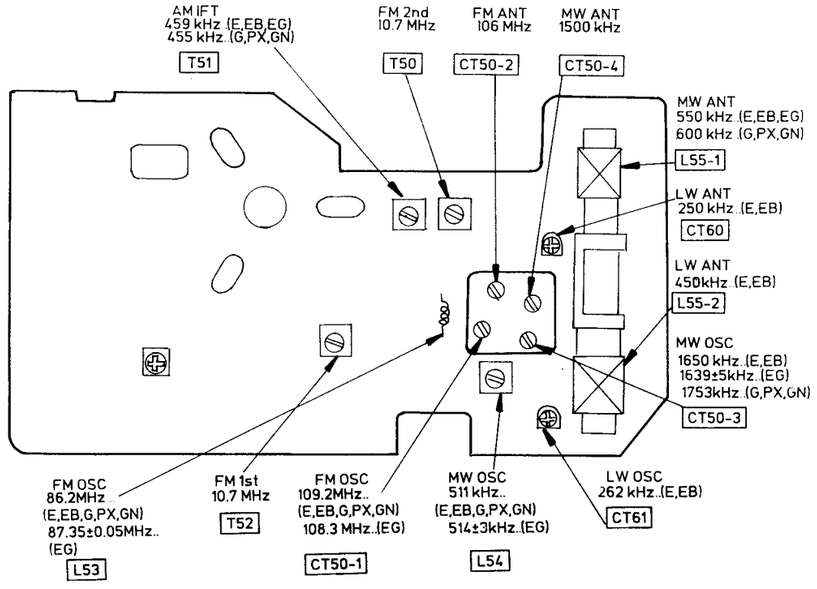
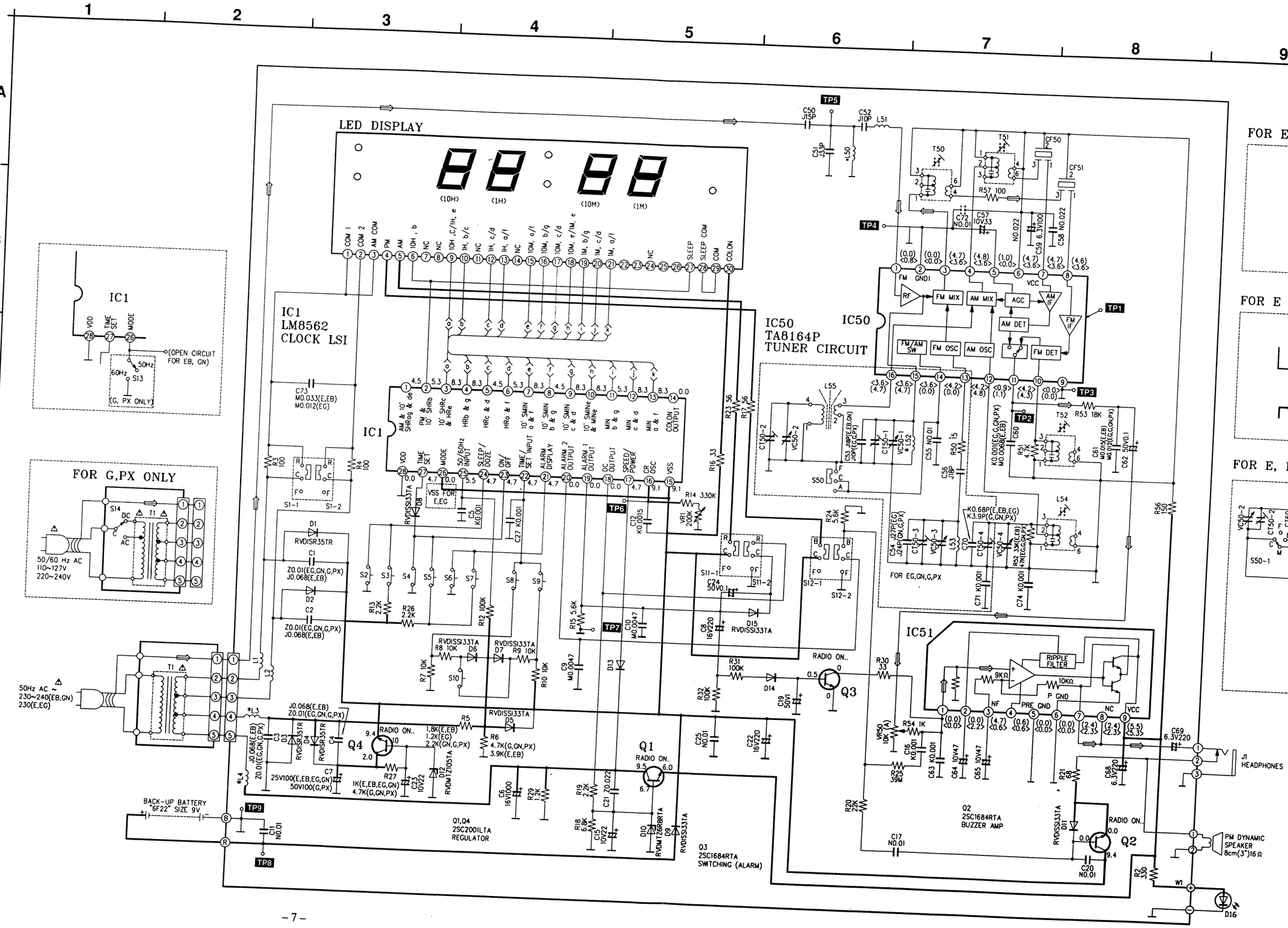


Fig. 3

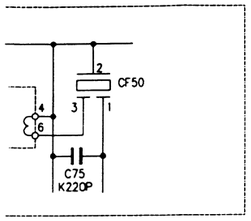


■ SCHEMATIC DIAGRAM


LED DISPLAY
(10H) (1H) (10M) (1M)
IC1
LM8562
CLOCK LSI
IC50
TA8164P
TUNER CIRCUIT
IC51
IC1
VDD TIME SET MODE 50/60Hz INPUT SLEEP / DOZE ON / OFF TIME / SET INPUT ALARM DISPLAY ALARM 2 OUTPUT ALARM 1 OUTPUT DC OUTPUT SPEED / POWER CR OSC VSS
COM 1 COM 2 AM COM PM AM 10H, b 10H, c/h, e 1H, b/c 1H, c/d 1H, a/f 10M, a/f 10M, b/g 10M, c/d 10M, e/1M, e 1M, b/g 1M, c/d 1M, a/f SLEEP SLEEP COM COM COLON
FM GND1 RF FM MIX AM MIX AGC AM IF FM IF AM DET FM DET FM/AM SW FM OSC AM OSC VCC
RIPPLE FILTER 9KΩ 10KΩ P GND NF PRE GND NC VCC
IC1 AM & 10' SHRdg & de PM & 10' SHRb 10' SHRc & HRe HRb & g HRc & d HRa & f 10' SMIN a & f 10' SMIN b & g 10' SMIN c & d 10' SMIne & MIHe MIN b & g MIN c & d MIN a & f COLON OUTPUT
IC1 VDD TIME SET MODE 50/60Hz INPUT SLEEP / DOZE ON / OFF TIME / SET INPUT ALARM DISPLAY ALARM 2 OUTPUT ALARM 1 OUTPUT DC OUTPUT SPEED / POWER CR OSC VSS
TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8 TP9
T1 T50 T51 T52
CF50 CF51
L50 L51 L52 L53 L54 L55
S1-1 S1-2 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11-1 S11-2 S12-1 S12-2 S13 S14 S50
D1 RVDISR35TR D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D13 D14 D15 RVDISSI33TA
Q1 Q2 Q3 Q4
Q1,Q4 2SC2001LTA REGULATOR
Q2 2SC1684RTA BUZZER AMP
Q3 2SC1684RTA SWITCHING (ALARM)
RADIO ON..
IC1 LM8562 CLOCK LSI
IC1 IC1
IC50 TA8164P TUNER CIRCUIT
IC51
FOR G,PX ONLY
50/60 Hz AC 110~127V 220~240V
50Hz AC ~ 230~240(EB,GN) 230(E,EG)
BACK-UP BATTERY "6F22" SIZE 9V
FOR E, EB ONLY
FOR E ONLY
FOR E, EB ONLY
FOR EG,GN,G,PX
J1 HEADPHONES
PM DYNAMIC SPEAKER 8cm(3") 16Ω
W1
D16
R2 330
R3 100
R4 100
R5 R6 R7 R10 R12 R13 R14 R15 R16 R23 R24 R25 R26 R27 R29 R30 R31 R32 R50 R51 R52 R53 R54 R56 R57
C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C15 C16 C17 C18 C19 C20 C21 C22 C24 C25 C27 C50 C51 C52 C53 C54 C55 C56 C57 C58 C59 C60 C61 C62 C63 C64 C65 C68 C69 C70 C71 C73 C74 C75
VR21 200K VR50 10K(A)
L1 L2 *L3 *L4
CT50-1 CT50-2 CT50-3 CT50-4 CT60 CT150-1 CT150-2 CT150-3 CT150-4
VC50-1 VC50-2 VC50-3 VC50-4 VC150-1 VC150-2 VC150-3 VC150-4
(OPEN CIRCUIT FOR EB, GN)
50Hz 60Hz
(G, PX ONLY)

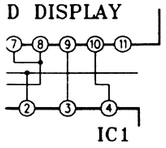
10 11 12 13 14

ONLY



LY

D DISPLAY



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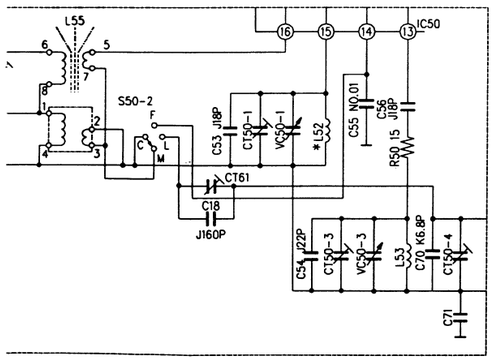
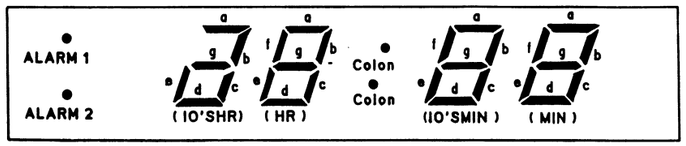
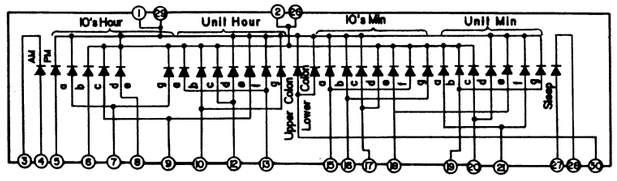


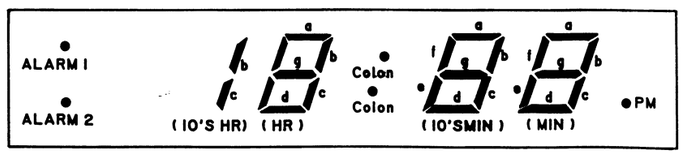
■ DESCRIPTION OF DISPLAY

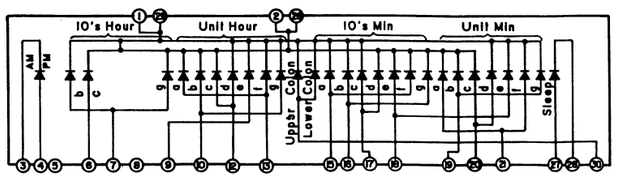
(SL204230T)
[For (E), (EG) Area]





(SL204227T)
[For (EB), (G), (GN), (PX) Area]





NOTE:

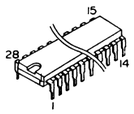
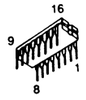
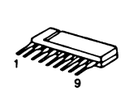
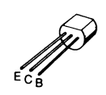
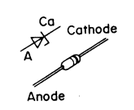
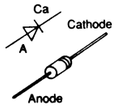
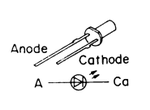
1. S1: BRIGHTNESS switch in high position
2. S2: Doze switch in off position
3. S3: SLEEP switch in off position
4. S4: POWER OFF/TIME SET switch in off position
5. S5: RADIO ON switch in off position
6. S6: Alarm 1 DISP/ADJ switch in off position
7. S7: ALARM 2 DISP/ADJ switch in off position
8. S8: TIME SET FWD switch in off position
9. S9: TIME SET REV switch in off position
10. S10: TIME SET FAST switch in off position
11. S11-1: ~S11-2: ALARM 2 SEL switch in "BUZZER" position (B...Buzzer, OF...OFF)
12. S13: Frequency switch in 50 Hz position
13. S14: Voltage selector switch in 110 ~ 127V position
14. S50: BAND switch in "FM" position (F...FM, A...AM)
15. VR1: Battery Back-up Control VR
16. VR50: Volume Control VR
17. AC Current: Vol min 23.21 mA (Radio)
    Vol max 34.30 mA (Radio)
    Measurement condition:
    (Radio: FM 60 dB, 30% mod)
    AM 74 dB/m, 30% mod)
18. DC voltage measurements are taken with electronic voltmeter from negative terminal of battery
    < > ...FM, ( ) ...AM, NO MARK...CLOCK
19. The mark (■) shows test point
    eg: TP1 = test point 1
20. *L3, L4, L50, L52 are coils formed on the P.C.B. and are thus not found on Replacement Parts List

• This schematic diagram may be modified at anytime with the development of new technology.

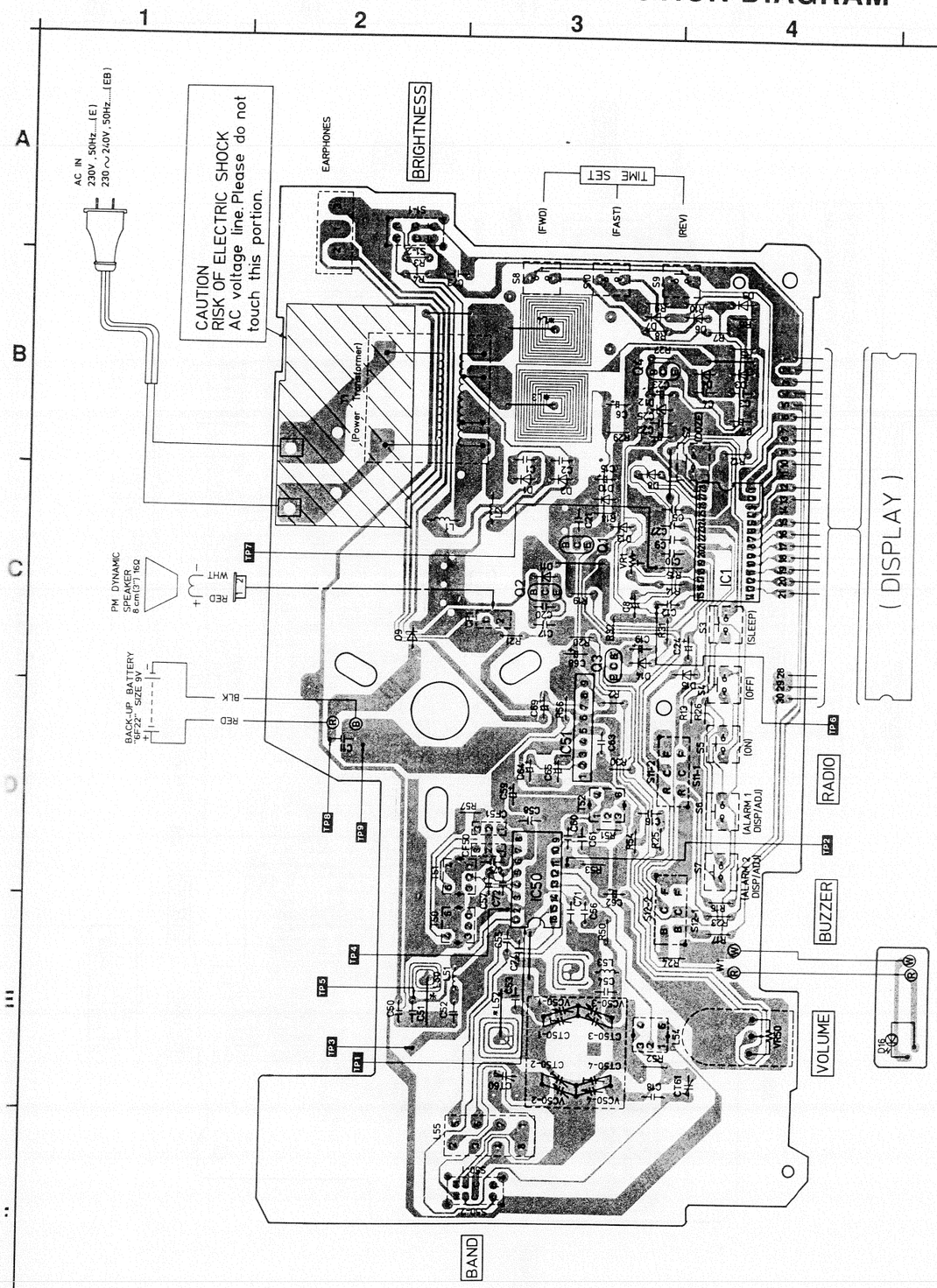
..... FM SIGNAL

..... +B LINE

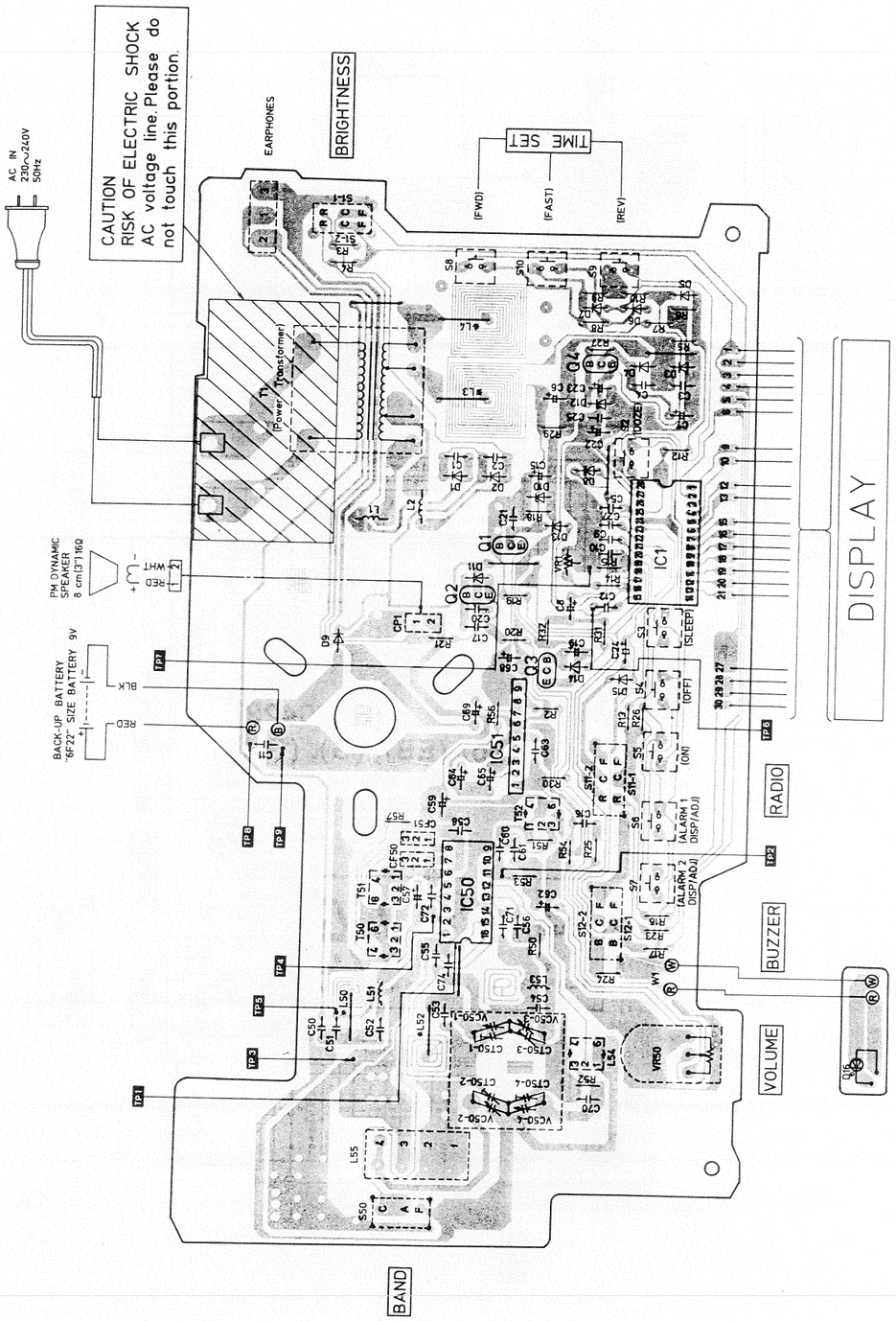
■ TERMINAL GUIDE OF IC'S TRANSISTORS AND DIODES

			
LM 8562 28 pin	**TA 8164P** 16 pin	**TA 7368 P** 9 pin	**2SC2001 LTA** **2SC1684 RTA**
			
RVDMTZ6R8B **RVDMTZ10B**	**RVDISR35TR** **RVD1SS133TA**	**RVDSLV31MT**	

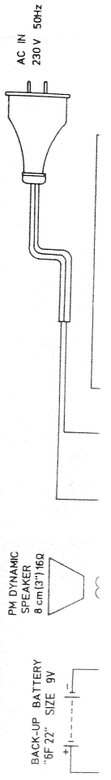
■ CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



FOR RC-6099 (E) (EB)

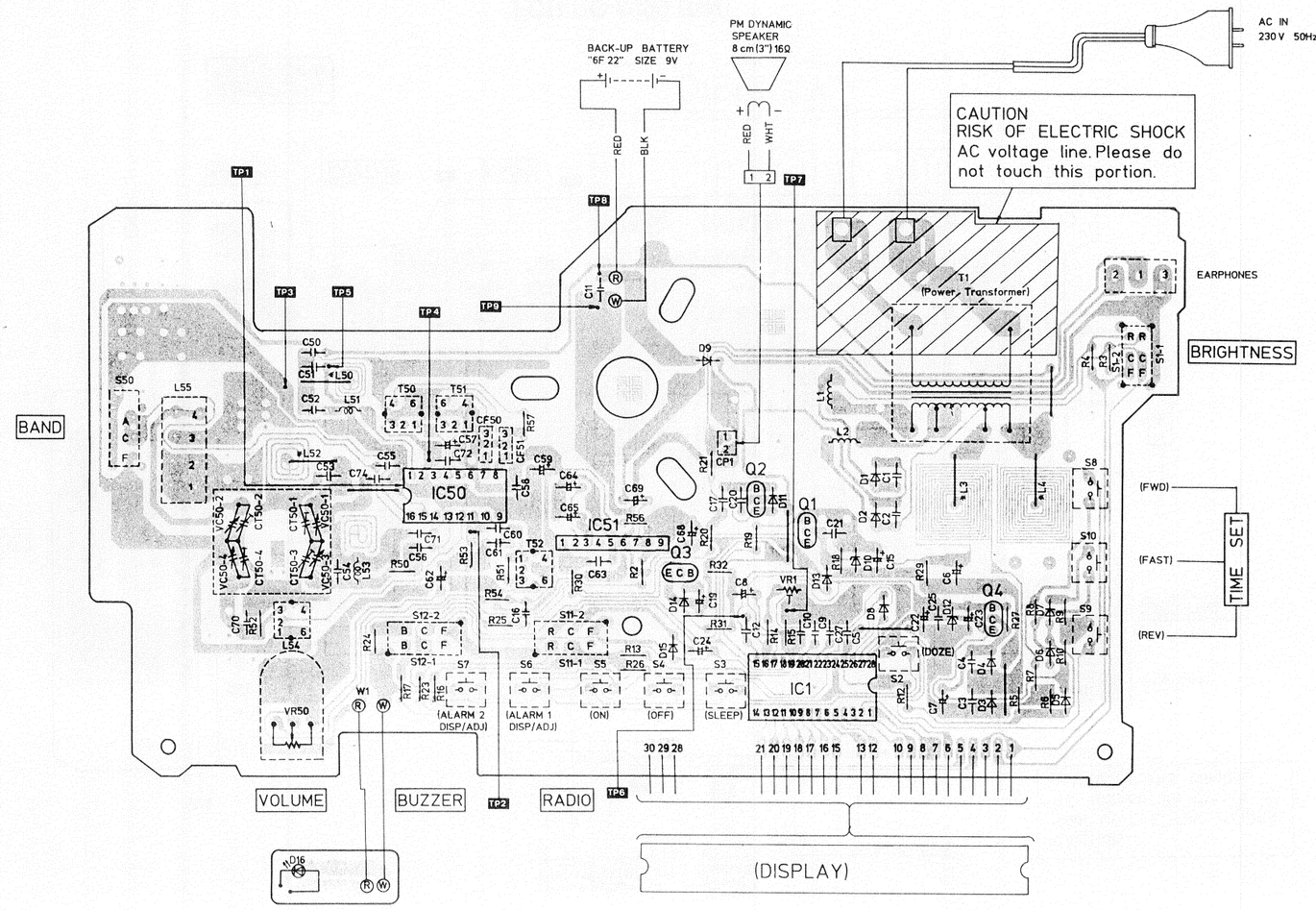


FOR RC-6099 (GN)

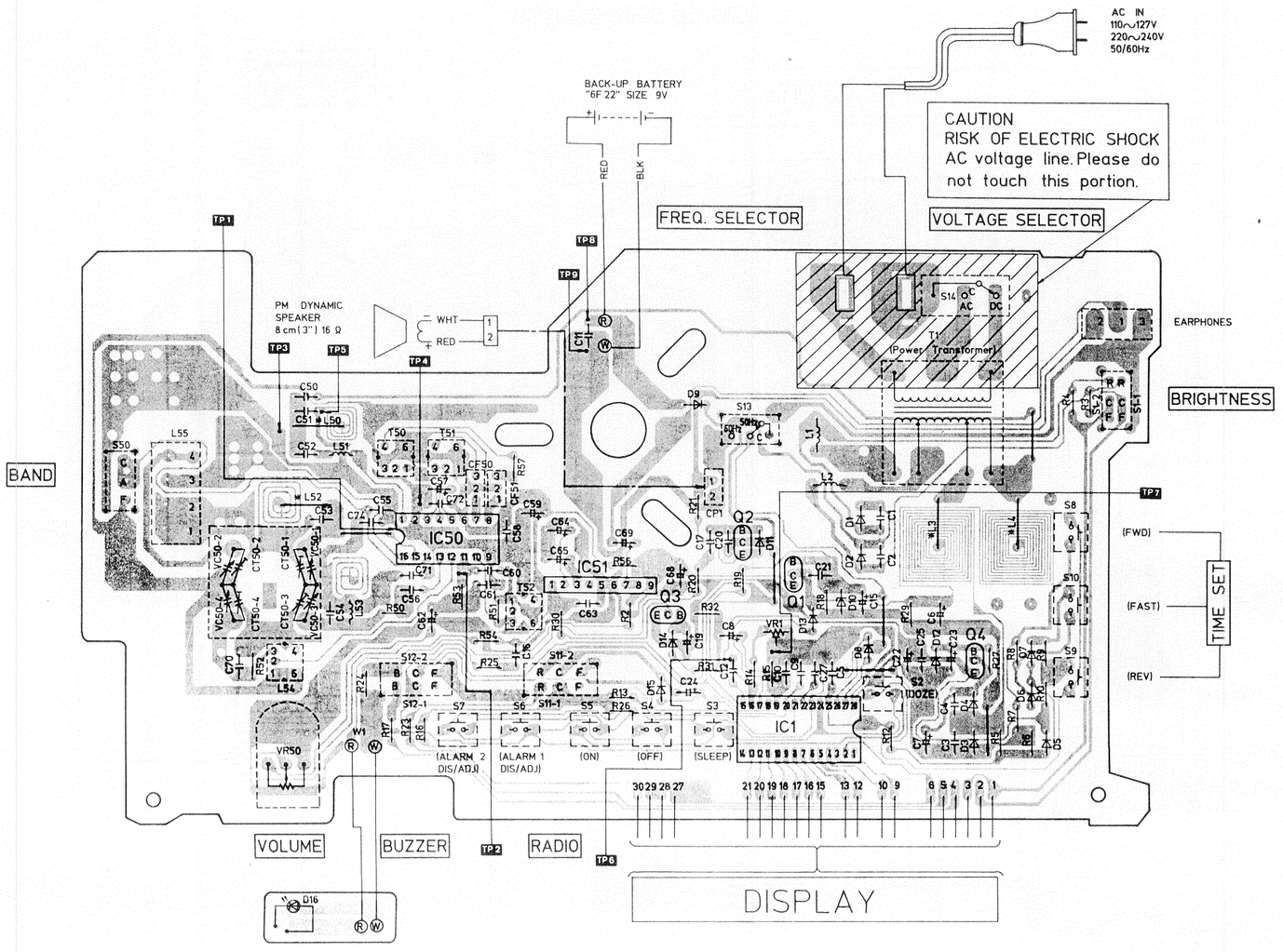


DISPLAY

FOR RC-6099 (GN)



FOR RC-6099 (EG)



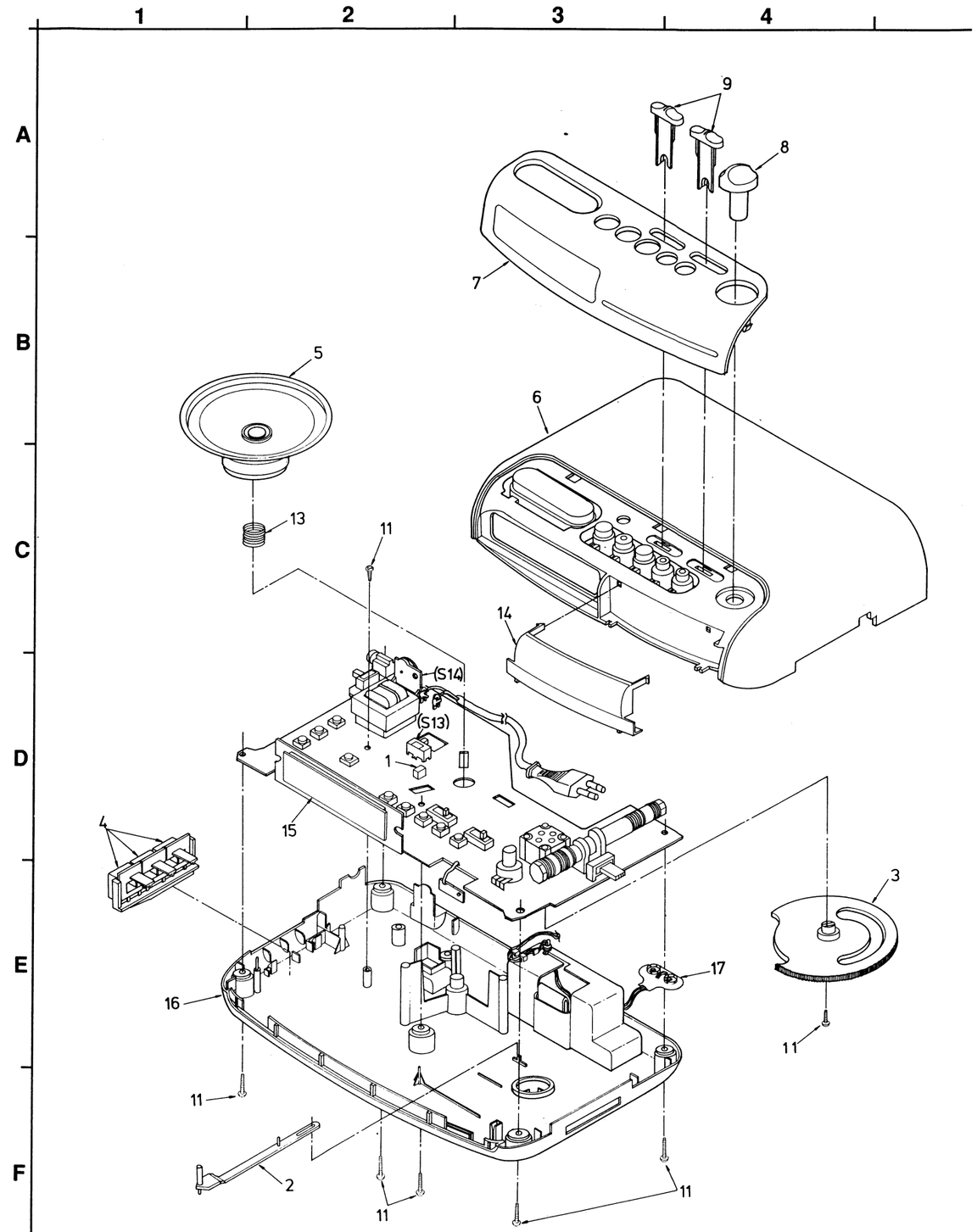
FOR RC-6099 (G) (PX)

■ RESISTORS & CAPACITORS

Notes : * Capacitance values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K=1, 000 (OHM), 1M=1, 000k (OHM)

Ref No.	Part No.	Values & Remarks
		RESISTORS
R2	ERDS2TJ331T	330 1/4W
R3	ERDS2TJ101T	100 1/4W
R4	ERDS2TJ101T	100 1/4W
R5	ERDS2TJ182T	1.8K 1/4W (E, EB)
R5	ERDS2TJ122T	1.2K 1/4W (EG)
R5	ERDS2TJ222T	2.2K 1/4W (GN, G, PX)
R6	ERDS2TJ392T	3.9K 1/4W (E, EB)
R6	ERDS2TJ472T	4.7K 1/4W (G, GN, PX, EG)
R7	ERDS2TJ103T	10K 1/4W
R8	ERDS2TJ103T	10K 1/4W
R9	ERDS2TJ103T	10K 1/4W
R10	ERDS2TJ103T	10K 1/4W
R12	ERDS2TJ104T	100K 1/4W
R13	ERDS2TJ222T	2.2K 1/4W
R14	ERDS2TJ334T	330K 1/4W
R15	ERDS2TJ562T	5.6K 1/4W
R16	ERDS2TJ330T	33 1/4W
R17	ERDS2TJ560T	56 1/4W
R18	ERDS2TJ682T	6.8K 1/4W
R19	ERDS2TJ222T	2.2K 1/4W
R20	ERDS2TJ223T	22K 1/4W
R21	ERDS2TJ680T	68 1/4W
R23	ERDS2TJ560T	56 1/4W
R24	ERDS2TJ562T	5.6K 1/4W
R25	ERDS2TJ395T	3.9M 1/4W
R26	ERDS2TJ222T	2.2K 1/4W
R27	ERDS2TJ102T	1K 1/4W (E, EB, EG, GN)
R27	ERDS2TJ472T	4.7K 1/4W (G, GN, PX)
R29	ERDS2TJ122T	1.2K 1/4W
R30	ERDS2TJ330T	33 1/4W
R31	ERDS2TJ104T	100K 1/4W
R32	ERDS2TJ104T	100K 1/4W
R50	ERDS2TJ150T	15 1/4W
R51	ERDS2TJ472T	4.7K 1/4W
R52	ERDS2TJ333T	33K 1/4W (E, EB)
R52	ERDS2TJ473T	47K 1/4W (EG, GN, G, PX)
R53	ERDS2TJ223T	22K 1/4W
R54	ERDS2TJ102T	1K 1/4W
R56	ERDS2TJ151T	150 1/4W
R57	ERDS2TJ101T	100 1/4W
		CAPACITORS
C1	ECQV1H683JZ3	0.068 50V (E, EB)
C1	ECKR1H103ZF5	0.01 50V (EG, GN, G, PX)
C2	ECQV1H683JZ3	0.068 50V (E, EB)
C2	ECKR1H103ZF5	0.01 50V (EG, GN, G, PX)
C3	ECQV1H683JZ3	0.068 50V (E. EB)
C3	ECKR1H103ZF5	0.01 50V (EG, GN, G, PX)
C4	ECQV1H683JZ3	0.068 50V (E. EB)
C4	ECKR1H103ZF5	0.01 50V (EG, GN, G,PX)
C5	ECBT1H102KB5	0.001 50V
C6	ECEA1CU102E	1000 16V
C7	ECEA1EU101B	100 25V (E. EB, EG, GN)
C7	ECEA1HU101B	100 50V (G.PX)
C8	ECEA1CU221B	220 16V
C9	ECBT1C472MR5	0.0047 16V
C10	ECBT1C472MR5	0.0047 16V
C11	ECBT1C103NS5	0.01 16V
C12	ECQG1H152KZT	0.0015 50V
C15	ECEA1AU220B	22 10V
C16	ECBT1H102KB5	0.001 50V
C17	ECBT1C103NS5	0.01 16V
C18	ECQP2A161JZT	160P 100V
C19	ECEA1HU010B	1 50V
C20	ECBT1C103NS5	0.01 16V
C21	ECBT1E223ZF5	0.022 25V
C22	ECEA1CU221B	220 16V
C23	ECEA1AU220B	22 10V
C24	ECFR1E683KR	0.068 25V
C25	ECBT1C103NS5	0.01 16V
C27	ECBT1H102KB5	0.001 50V
C50	ECBT1H150JC5	15P 50V
C51	ECBT1H560J5	56P 50V
C52	ECBT1H100J5	10P 50V
C53	ECBT1H180JC5	18P 50V (E, EB, GN)
C53	ECBT1H200JC5	20P 50V (EG, G, PX)
C54	ECBT1H240J5	24P 50V (E, EB, GN, G, PX)
C54	ECBT1H270J5	27P 50V (EG)
C55	ECBT1C103NS5	0.01 16V
C56	ECBT1H180JC5	18P 50V
C57	ECEA1AU330B	33 10V
C58	ECBT0J223NS5	0.022 6.3V
C59	ECEA0JU101B	100 6.3V
C60	ECBT1C682MR5	0.0068 16V (E, EB)
C60	ECBT1H102KB5	0.001 50V (EG, GN, G, PX)
C61	ECBT0J153MS5	0.015 6.3V (E, EB)
C61	ECFR1E123KR	0.012 25V (EG, GN, G, PX)
C62	ECEA1HU0R1B	0.1 50V
C63	ECBT1H102KB5	0.001 50V
C64	ECEA1AU470B	47 10V
C65	ECEA1AU470B	47 10V
C68	ECEA0JU221B	220 6.3V
C69	ECEA0JU221B	220 6.3V
C70	ECBT1H6R8KC5	6.8P 50V (EG)
C70	ECBT1H3R9KC5	3.9P 50V (GN, G, PX)
C71	ECBT1H102KB5	0.001 50V
C72	ECBT1C103NS5	0.01 16V
C73	ECFR1E333KR	0.033 25V (E, EB)
C73	ECFR1E123KR	0.012 25V (EG)
C74	ECBT1H102KB5	0.001 50V
C75	ECBT1H221KB5	220P 50V (E,EB)

■ CABINET PARTS LOCATION



■ REPLACEMENT PARTS LIST

Notes : *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
*Bracketed indications in Remarks columns specify the area (Refer to the first page for area).
Parts without these indications can be used for all areas.
*[M] Indicates in the remarks columns parts that are supplied by **MESA**.

Ref No.	Part No.	Part Name & Description	Remarks
		CABINET & CHASSIS	
1	SJT30243-V	CONNECTOR (CP1)	
2	RGJX0004-W1	POINTER	[M]
3	RGXX0005-W	TUNING KNOB	[M] (W) (E, EB)
3	RGXX0005-K	TUNING KNOB	[M] (K) (E, EG, GN, G PX)
4	RGUX0011-W	TIME-SET BUTTON	[M] (W) (E, EB)
4	RGUX0011-K	TIME-SET BUTTON	[M] (K) (E, EG, GN, G PX)
5	EAS8P307JA	SPEAKER	[M] (E, EB, EG, GN, PX)
5	EAS8P28JC- J	SPEAKER	[M] (G)
6	RKMX0004A-W	TOP CABINET	[M] (E) (W)
6	RKMX0004A-K	TOP CABINET	[M] (E, EG, GN) (K)
6	RFKKRC6099EB	TOP CABINET ASS'Y	[M] (EB) (W)
6	RFKKRC6099GK	TOP CABINET ASS'Y	[M] (G, PX) (K)
7	RKWX0006B-K	CLEAR PANEL	[M] (E,EB)
7	RKWX0006C-K	CLEAR PANEL	[M] (EG)
7	RKWX0006A-K	CLEAR PANEL	[M] (GN, G, PX)
8	RGWX0006-K	VOLUME KNOB	[M]
9	RGBX0005-K	SELECTOR BUTTONS	[M]
11	XTV3+12G	CABINET & PCB SCREW	
13	RUQ50ZA	SPEAKER SPRING	[M]
14	RMQX0002-C	LIGHT REFLECTOR	[M]
15	SL204230T	LED DISPLAY	[M] (E, EG)
15	SL204227T	LED DISPLAY	[M] (EB, GN,G, PX)
16	RFKHRC6099EB	BOTTOM CABINET ASS'Y	[M] (EB)
16	RFKHRC6099EG	BOTTOM CABINET ASS'Y	[M] (EG)
16	RKSX0004B-W	BOTTOM CABINET	[M] (E) (W)
16	RKSX0004B-K	BOTTOM CABINET	[M] (E) (K)
16	RFKHRC6099GN	BOTTOM CABINET ASS'Y	[M] (GN)
16	RKSX0004C-K	BOTTOM CABINET	[M] (G)
16	RFKHRC6099PX	BOTTOM CABINET ASS'Y	[M] (PX)
17	RJB5009VA-1	BATTERY CONNECTOR	[M]
		INTEGRATED CIRCUIT(S)	
IC 1	LM8562	IC, CLOCK LSI	[M]
IC50	TA8164P	IC, TUNER	[M]
IC51	TA7368P	IC, POWER AMP	
		TRANSISTOR(S)	
Q1	2SC2001LTA	TRANSISTOR	[M]
Q2	2SC1684RTA	TRANSISTOR	
Q3	2SC1684RTA	TRANSISTOR	
Q4	2SC2001LTA	TRANSISTOR	[M]
		DIODE(S)	
D 1	RVD1SR35TR	DIODE, RECT	
D 2	RVD1SR35TR	DIODE, RECT	
D 3	RVD1SR35TR	DIODE, RECT	
D 4	RVD1SR35TR	DIODE, RECT	
D 5	RVD1SS133TA	DIODE, SWITCHING	
D 6	RVD1SS133TA	DIODE, SWITCHING	
D 7	RVD1SS133TA	DIODE, SWITCHING	
D 8	RVD1SS133TA	DIODE, SWITCHING	
D 9	RVD1SS133TA	DIODE, SWITCHING	
D10	RVDMTZ6R8BTA	DIODE, REGULATOR	
D11	RVD1SS133TA	DIODE, SWITCHING	
D12	RVDMTZ10BTA	DIODE, REGULATOR	
D13	RVD1SS133TA	DIODE, SWITCHING	
D14	RVD1SS133TA	DIODE, SWITCHING	
D15	RVD1SS133TA	DIODE, SWITCHING	
D16	RVDSLV31MT	DIAL LIGHT	[M]
		VARIABLE RESISTOR(S)	
VR 1	EVNDXAA00B25	V.R, BATTERY BACK-UP	
		CONTROL	
VR50	EVJF8AF20A14	V.R, VOLUME CONTROL	
		VARIABLE CAPACITOR(S)	
VC50	RCV4LC2V2K-S	V.C	(E,EB,EG)
VC50	RCV4PCTOV-R	V.C	[M] (GN,G,PX)
CT60	RCVTZ30F	TRIMMING CAPACITOR	(E,EB)
CT61	RCVTZ30F	TRIMMING CAPACITOR	(E,EB)
		COIL(S) & TRANSFORMER(S)	
L1	RLQY11G4W-0	COIL	
L2	RLQY11G4W-0	COIL	
L51	RLQY30S1W	COIL, BPF	[M]
L53	RL04Y209-E	COIL, FM OSC	[M] (E,EB,GN,G,PX)

Ref No.	Part No.	Part Name & Description	Remarks
L53	RL04N187-0	COIL, FM OSC	[M] (EG)
L54	RL02B004-M	COIL, AM OSC	[M]
L55	RLV6C005-0Z	COIL, AM ANTENNA	[M] (E,EB)
L55	RLF2C63-0Z	COIL, AM ANTENNA	[M] (EG)
L55	RLV2C005-0Z	COIL, AM ANTENNA	[M] (GN,G,PX)
T1 ⚠	RTP1I2E001-V	POWER TRANSFORMER	[M] (E,EG)
T1 ⚠	RTP1I2B001-V	POWER TRANSFORMER	[M] (EB,GN)
T1 ⚠	RTP1I2G001-V	POWER TRANSFORMER	[M] (G,PX)
T50	RLI4B153-M	TRANSFORMER, FM IFT	
T51	RLI2B002-M	TRANSFORMER, AM IFT	[M]
T52	RLI4B153-M	TRANSFORMER, FM IFT	
		CERAMIC FILTER(S)	
CF50	RVFSFU459B	CERAMIC FILTER, AM	[M] (E,EB,EG)
CF50	RVF455RBT-D	CERAMIC FILTER, AM	[M] (GN,G,PX)
CF51	RVF107WMZT	CERAMIC FILTER, FM	
		SWITCH(ES)	
S1	RSS2B52ZA-H	S.W, BRIGHTNESS	
S2	EVQ21405R	S.W, DOZE	
S3	EVQ21405R	S.W, SLEEP	
S4	EVQ21405R	S.W, POWER OFF/TIME SET	
S5	EVQ21405R	S.W, RADIO ON	
S6	EVQ21405R	S.W, ALARM 1 DISP/ADJ	
S7	EVQ21405R	S.W, ALARM 2 DISP/ADJ	
S8	EVQ21405R	S.W, TIME SET FWD	
S9	EVQ21405R	S.W, TIME REV	
S10	EVQ21405R	S.W, TIME SET FAST	
S11	RSS2B010-J	S.W, ALARM	[M]
S12	RSS2B010-J	S.W, ALARM	[M]

Ref No.	Part No.	Part Name & Description	Remarks
S13	RSS2A45ZA-H	S.W, FREQUENCY SWITCH	[M] (G,PX)
S14	RSR2A001S-H	S.W, VOLTAGE SELECTOR	[M] (G,PX)
S50	RSS3B35ZA-H	S.W, BAND FM/AM SW	(E,EB)
S50	RSS2A45ZA-H	S.W, BAND FM/AM SW	[M] (EG,GN,G,PX)
		JACK(S)	
J1	RJJD3M9ZA-H	JACK, EARPHONE	[M]
		PACKING MATERIAL(S)	
P1	RPKX0002	GIFT BOX	[M] (W) (E,EB)
P1	RPGX0009	GIFT BOX	[M] (K) (E)
P1	RPGX0008	GIFT BOX	[M] (EG)
P1	RPK0266	GIFT BOX	[M] (GN,PX)
P1	RPKX0003	GIFT BOX	[M] (G)
P2	RPF0065	MIRAMAT BAG	[M]
P3	RPN0491-1	POLYFOAM	[M]
		ACCESSORIES	
A1	RQT1175-E	INSTRUCTION MANUAL	[M] (EB,EG)
A1	RFKSRC6099E	INSTRUCTION	[M] (E)
		MANUAL ASS'Y	
A1	RQT1177-L	INSTRUCTION MANUAL	[M] (GN)
A1	RQT1178-G	INSTRUCTION MANUAL	[M] (G)
A1	RQT1109-P	INSTRUCTION MANUAL	[M] (PX)
A2 ⚠	RJA23YB-U	AC POWER SUPPLY CORD	[M] (E,EG)
A2 ⚠	RJA87ZA-K	AC POWER SUPPLY CORD	(EB)
A2 ⚠	RJA0014-U	AC POWER SUPPLY CORD	[M] (GN)
A2 ⚠	RJA52YA-A	AC POWER SUPPLY CORD	[M] (G)
A3 ⚠	RJP120ZDS-K	AC CORD ADAPTOR	(G,PX)

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